

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau(43) International Publication Date
24 July 2003 (24.07.2003)

PCT

(10) International Publication Number
WO 03/059861 A1(51) International Patent Classification⁷: C07C 51/373, 62/16, 67/333, 69/757

(21) International Application Number: PCT/JP02/13576

(22) International Filing Date:
26 December 2002 (26.12.2002)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
2002-003177 10 January 2002 (10.01.2002) JP(71) Applicant (for all designated States except US): SUM-
ITOMO CHEMICAL COMPANY, LIMITED [JP/JP];
5-33, Kitahama 4-chome, Chuo-ku, Osaka-shi, Osaka 541-
8550 (JP).

(72) Inventor; and

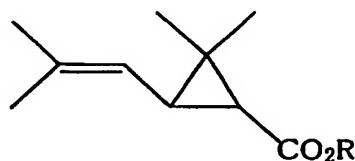
(75) Inventor/Applicant (for US only): YOSHIKAWA, Kouji
[JP/JP]; 9-5-1, Hon-machi, Toyonaka-shi, Osaka 560-0021
(JP).(74) Agents: AOYAMA, Tamotsu et al.; Aoyama & Partners,
IMP Building, 3-7, Shiromi 1-chome, Chuo-ku, Osaka-shi,
Osaka 540-0001 (JP).(81) Designated States (national): AE, AG, AL, AM, AT, AU,
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,
CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
GM, HR, HU, ID, IL, IN, IS, KE, KG, KR, KZ, LC, LK,
LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX,
MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG,
SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC,
VN, YU, ZA, ZM, ZW.(84) Designated States (regional): ARIPO patent (GH, GM,
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),
Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,
ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SI, SK,
TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

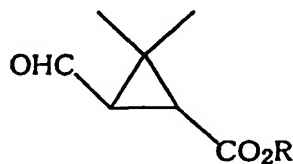
For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: PROCESS FOR PRODUCTION OF 3,3-DIMETHYL-2-FORMYLCYCLOPROPANECARBOXYLIC ACID DERIVATIVES



(1)

(57) Abstract: A process for the production of a 3,3-dimethyl-2-formylcyclopropanecarboxylic acid derivative of formula (2); wherein R is hydrogen, substituted or unsubstituted alkyl, substituted or unsubstituted aryl, or substituted or unsubstituted aralkyl, which process comprises reacting a 3,3-dimethyl-2-(2-methyl-1-propenyl)cyclopropanecarboxylic acid compound of formula (1); wherein R is as defined above, with a periodic acid compound in the presence of a ruthenium compound.



(2)